



IFW

CUSTOMER NUMBER 25268

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Jack J. Kolle et al. Attorney Docket No. TEMP0011
Serial No.: 10/777,484 Group Art Unit: 3672
Filed: February 12, 2004 Examiner:
Title: HYDRAULIC IMPULSE GENERATOR AND FREQUENCY SWEEP
MECHANISM FOR BOREHOLE APPLICATIONS

INFORMATION DISCLOSURE STATEMENT

Bellevue, Washington 98004

May 28, 2004

TO THE COMMISSIONER FOR PATENTS:

Applicant is aware of the information listed in the attached form that may be material to the prosecution of the above-identified patent application.

- ☒ 1. Copies of the listed non-U.S. patent publications and other information are enclosed for the Examiner's use.
- ☐ 2. Copies of the listed patents, publications, and other information were previously cited by or submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____, filed _____, and relied upon for an earlier filing date under 35 U.S.C. § 120.
- ☐ 3. A concise explanation of the relevance of document I.D. No. _____ (which is not in the English language), as presently understood by the individual designated under 37 C.F.R. § 1.56(c) most knowledgeable about its content, is provided _____.
- ☒ 4. Pursuant to 37 C.F.R. § 1.97(b), this information disclosure statement is being filed within three months of the filing date of the national application, within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, or before the mailing date of a first Office Action on the merits.
- ☐ 5. Pursuant to 37 C.F.R. § 1.97(c), this information disclosure statement is being filed after the period set forth in 37 C.F.R. § 1.97(b) but before the mailing date of either a final action under 37 C.F.R. § 1.113, or a notice of allowance under 37 C.F.R. § 1.311, and is accompanied by:
- a. _____ a certification as specified in 37 C.F.R. § 1.97(e); or
- b. _____ the fee set forth in 37 C.F.R. § 1.17(p). Check No. _____ in the amount of \$ _____ is enclosed.

1 6. Pursuant to 37 C.F.R. § 1.97(d), this information disclosure statement is being filed
2 after the mailing date of either:

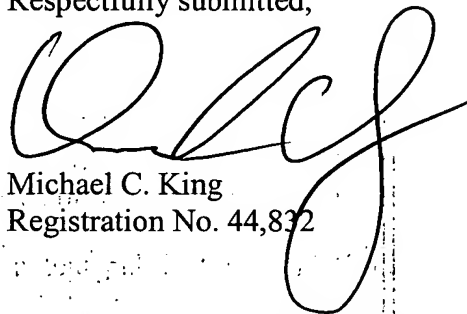
3 a. _____ a final action under 37 C.F.R. § 1.113; or

4 b. _____ a notice of allowance under 37 C.F.R. § 1.311,

5 but before payment of the issue fee. The statement is accompanied by a
6 certification as specified in 37 C.F.R. § 1.97(e), a statement requesting
7 consideration of the information disclosure statement, and the petition fee set
8 forth in 37 C.F.R. § 1.17(p). Check No. _____ in the amount of
\$ _____ is enclosed.

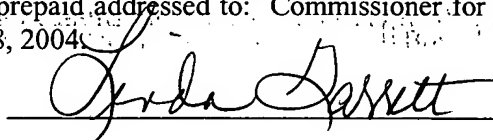
9 X 7. Please charge any additional fees or credit any overpayment to Deposit Account
10 No. 01-1940. A copy of this sheet is enclosed.

11 Respectfully submitted,

12 
13
14
15 Michael C. King
16 Registration No. 44,832

17 I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed
18 envelope as first class mail with postage thereon fully prepaid addressed to: Commissioner for Patents, P.O.
19 Box 1450, Alexandria, Virginia 22313-1450, on May 28, 2004.

20 Date: May 28, 2004

21 
22
23
24
25
26
27
28
29
30
31
32



CUSTOMER NUMBER 25268

INFORMATION DISCLOSURE STATEMENT LISTING SHEET

**Information Cited By Applicant(s) That May Be Material To
The Prosecution Of The Subject Application**

Applicants: Jack J. Kollé et al. Attorney Docket No. TEMP0011
Serial No.: 10/777,484 Group Art Unit: 3672
Filed: February 12, 2004 Examiner:
Title: HYDRAULIC IMPULSE GENERATOR AND FREQUENCY SWEEP MECHANISM FOR
BOREHOLE APPLICATIONS

U.S. PATENT DOCUMENTS

| *Examiner Initial | ID | Document No. | Date | Name | Class | Sub- Class |
|----------------------|------|--------------|-----------|---------------|-------|---------------|
| | US1 | 699,273 | 5/6/1902 | Wolski | | |
| | US2 | 1,963,090 | 6/19/1934 | Jakosky | 255 | 1 |
| | US3 | 3,648,789 | 3/14/1972 | Eriksson | 175 | 292 |
| | US4 | 4,033,429 | 7/5/1977 | Farr | 181 | 106 |
| | US5 | 4,817,739 | 4/4/1989 | Jeter | 175 | 38 |
| | US6 | 5,191,557 | 3/2/1993 | Rector et al. | 367 | 41 |
| | US7 | 5,222,425 | 6/29/1993 | Davies | 91 | 273 |
| | US8 | 5,396,965 | 3/14/1995 | Hall et al. | 173 | 73 |
| | US9 | 5,803,188 | 9/8/1998 | McInnes | 175 | 92 |
| | US10 | 6,053,261 | 4/25/2000 | Walter | 175 | 234 |
| | US11 | 6,094,401 | 7/25/2000 | Masak et al. | 367 | 84 |
| | US12 | 6,237,701 | 5/29/2001 | Kollé et al. | 175 | 1 |
| | US13 | 6,394,221 | 5/28/2002 | Cosma | 181 | 113 |

FOREIGN PATENT DOCUMENTS

NONE CITED

OTHER INFORMATION

| *Examiner Initial | Document No. | Document Information |
|----------------------|-----------------|---|
| | O1 | Rector, J.W., III, and Marion, B.P. "The use of drill-bit energy as a downhole seismic source." Geophysics. Vol. 56. No. 5 (May 1991): P.628-634, 9 FIGs. |

OTHER INFORMATION

| <u>*Examiner</u> <u>Initial</u> | <u>Document</u> <u>No.</u> | <u>Document Information</u> |
|------------------------------------|-------------------------------|--|
| _____ | O2 | Park, Choon Byong; Miller, Richard D.; Steeples, Don W.; and Black, Ross A. "Swept impact seismic techniques (SIST)." Geophysics. Vol. 61. No. 6 (November -December 1996): P 1789-1803. 13 FIGs. |
| _____ | O3 | Borland, W.H.; Hayashida, N.; Kusaka, H.; Leaney W.S.; and Nakanishi, S. "Drill Bit Seismic, Vertical Seismic Profiling, and Seismic Depth Imaging to Aid Drilling Decisions in the Tho Tinh Structure Nam Con Son Basin - Vietnam." Butsuri-Tansa Vol. 51, No. 1 (1998) p. 27-44. |

Examiner's Signature

Date

*Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

lrg
5/28/04